Remarks/Arguments:

Claims 1, 10 and 16 stand rejected under 35 U.S.C. 112, second paragraph as being indefinite. Specifically, the Examiner alleges, "The claims recite 'information inherently available'. It is not quite clear what is being claimed. What is the information inherently available? Can information be inherent?"

Applicant respectfully disagrees. A person of ordinary skill in the art reading the disclosure of the present application, in particular paragraph [0021], would understand that the element "information inherently available" means "information about the quality of link 42, including such information as signal strength and reachability of base station 46". Applicant reproduces paragraph [0021] for the Examiner's convenience.

> "[0021] At step 420, the quality of the link is determined. In the present example, the quality of link 42 is determined. This step is represented graphically in Figure 4, as object 110 queries (indicated at reference character 114) information that is inherently available about the quality of link 42 from data link layer 102 of protocol stack 100 that is employed to implement link 42. In particular, layer 402 is queried by object 110 for known information about the quality of link 42, including such information as signal strength and reachability of base station 46."

Claims 1, 3, 10, 12, 16-22 and 28-32 stand rejected under 35 U.S.c. 103(a) as being unpatentable over Stephens (US 2004/0258039 Al) in view of Riedel et a1. (US 7,289,453 B2) and further in view of Chapman et al. (US 5,926,468).

The Examiner concedes that both Stephens and Riedel do not disclose the element, "repeating said transmitting step until said transmitting step fails; determining, responsive to said transmitting step failing, a quality of said link", recited by claim 1 of the present application.

However, the Examiner asserts:

> "Chapman teaches repeating said transmitting step until said transmitting step fails (Figs. 5-6A, steps 520-530 and 620-630; col. 6, line 65-col. 7, line 3, clearly illustrates continues to transmit the frames until the link fails or fails to receive acknowledgement) and determining, responsive to said transmitting step failing, the quality of said link (Figs. 5-6A, steps 530-550 or 630-660; col. 6, lines 38-57; col. 7, lines 3-20, clearly illustrating that the condition of the link is determined in response to failing of the transmitting step)."

Applicant respectfully disagrees.

Chapman discloses the use of a state machine to determine the state of a data link layer in a communication protocol. "Preferably, the state machines 231a, 231b each include a first state variable 232a, 232b representing a sequence number of a next frame to be transmitted, and a second state variable 234a, 234b representing a second number of a next frame expected to be received by the Data Link Layer 230a, 230b. The state machine for an entity may also include a third state variable 236a, 236b representing a sequence number of a last frame transmitted by the entity which was acknowledged by the other entity." (See Chapman column 4 lines 61-67 to column 5 lines 1-2.) When transmission failures occur, Chapman attempts to reset the data link layer rather than resetting the link. However, contrary to the Examiner's assertion, the figures

and passages referenced by Chapman Figs. 5-6A, steps 530-550 or 630-660; col. 6, lines 38-57; col. 7, lines 3-20 do not disclose the element, "determining, responsive to said transmitting step failing, the quality of said link", recited by claim 1 of the present application. Applicant reproduces Chapman col. 6, lines 38-57; col. 7, lines 3-20 to assist our discussion.

> "If it is determined that the transmitted Information Frame is not communicated to the second Data Link Layer (Block 530), the first and second Data Link Layers are reset (Block 540). Those skilled in the art will appreciate that a failure to communicate an Information Frame may occur in a number of different ways. For example, a failure may be declared after an entity attempts to transmit an Information Frame a predetermined number of times without receiving an acknowledgment that the Information Frame has been received. Those skilled in the art will appreciate that other ways of determining a communication failure may be used with the present invention, for example, by waiting until a predetermined number of Information Frames go unacknowledged during a predetermined time period. After resetting the first and second Data Link Layers, transmission of Information Frames indicating a normal condition for the Data Link may then resume (Block 550). The Data Link is maintained through the reset operation, thus avoiding the need to establish a new Data Link each time a communication failure occurs.
>
> ...
>
> If the first entity fails to receive acknowledgment for a predetermined number of Information Frames transmitted by the first entity (Block 630), a first state variable included in the first state

> machine, corresponding to the sequence number of the next frame to be transmitted by the first entity, is set to a predetermined value (Block 640), and an Information Frame indicating a reset condition and including a sequence number having the predetermined value is then transmitted (Block 650). Preferably, the first entity continues to transmit Information Frames indicating a reset condition until acknowledgment is received from the second entity (Blocks 660, 650). The sequence numbers in these frames may be incremented to uniquely identify each frame and allow the receiving entity to process these frames in the same manner as normal Information Frames. Once an acknowledgment of the reset condition is received, transmission of normal Information Frames may then resume (Block 620)."

The passage "If it is ... are reset (Block 540)" states that if there is a failure in transmitting a packet, the data link layers are reset. The passage "Those skilled in ... predetermined time period" provides the potential reasons for the transmission failure. The passage, "After resetting the ... communication failure occurs" provides the benefit of resetting the link data layers rather than resetting the link. The passage, "If the first ... then resume (Block 620)" describes how Chapman uses the state machine to reset the link data layers.

Contrast to Chapman, claim 1 of the present application recites, "***determining***, responsive to said transmitting step failing, ***a quality*** of said link at an electronic device by examining quality-of-service (QoS) information inherently available within a second layer of said protocol stack; said second layer being a different layer in said protocol stack than said first layer." Chapman does not determine the quality of the link, it uses the state machine as an accounting mechanism to determine when to reset the data link layers. Consequently, Chapman does not

disclose the element, "determining, responsive to said transmitting step failing, ***a quality*** of said link", recited by claim 1 of the present application.

Applicant respectfully submits that the above comments also apply to independent claims 10 and 16.

Applicant respectfully submits that for at least the above reasons, independent claims 1, 10, and 16 are patentable over Stephens in view of Riedel and further in view of Chapman.

As the independent claims are now deemed patentable over Stephens in view of Riedel and further in view of Chapman, Applicant respectfully submits that the dependent claims are likewise patentable over Stephens in view of Riedel and further in view of Chapman.

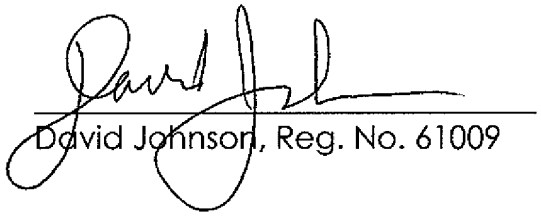
Conclusion:

Applicant believes that this application is now in condition for allowance. To the extent that any issues remain to be resolved, however, Applicant requests that the Examiner contact the undersigned to resolve these issues.

The Commissioner is also authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-3750.

Date: September 15, 2009

Respectfully submitted,



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